



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RB910-0003
Job Sheet 169222



Part No: RB910-0003

Job Qty: 1 ea

Part Name: Tail Rotor Gearbox Drain Hose (Bell 430)



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 12/5/17

Job Tracking No:

Due Date: 12/14/17

Created By: Marie Lajeunesse

Type: Stock

Description:

Customer: Servicio Tecnico De Mexico - Stam (CSERV06)

Hangar 10 Zona G De Hangares Aeropuerto Internacional Del Cd De Mexico Mexico City, Distrito Federal,
15620 Mexico ph:52 55 5133 1109 fx:52-55-5133-3863.

Note: IPP Rev A 17.11.08 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea		12/13/17	0.00	0.00	Start Up Small Fab-2		MLL
110	Small Fab	1 pcs		12/14/17	0.00	1.00	Small Fab		MLL
120	QC	1 pcs		12/14/17	0.00	0.00	QC5		33
130	Packaging	1 pcs		12/14/17	0.00	0.00	Packaging3	GA	AT 18/06/17
140	QC21-SA	1 Ea		12/14/17	0.00	0.00	QC21		AD

Part Op 110 - Assemble as per DWG. Sheet 1
Descriptions:

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	2044T47 5016490	1	10	0	0
	2044T67 5009694	2	50	0	0
	51495K116 5009690	1	10	0	0
	9263K642 5009684	1	20	0	0
	K010-0608	6	62	0	0
	PAD210 5021250	1	0	0	0
	RB910-0003-1 5018792	1	1	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

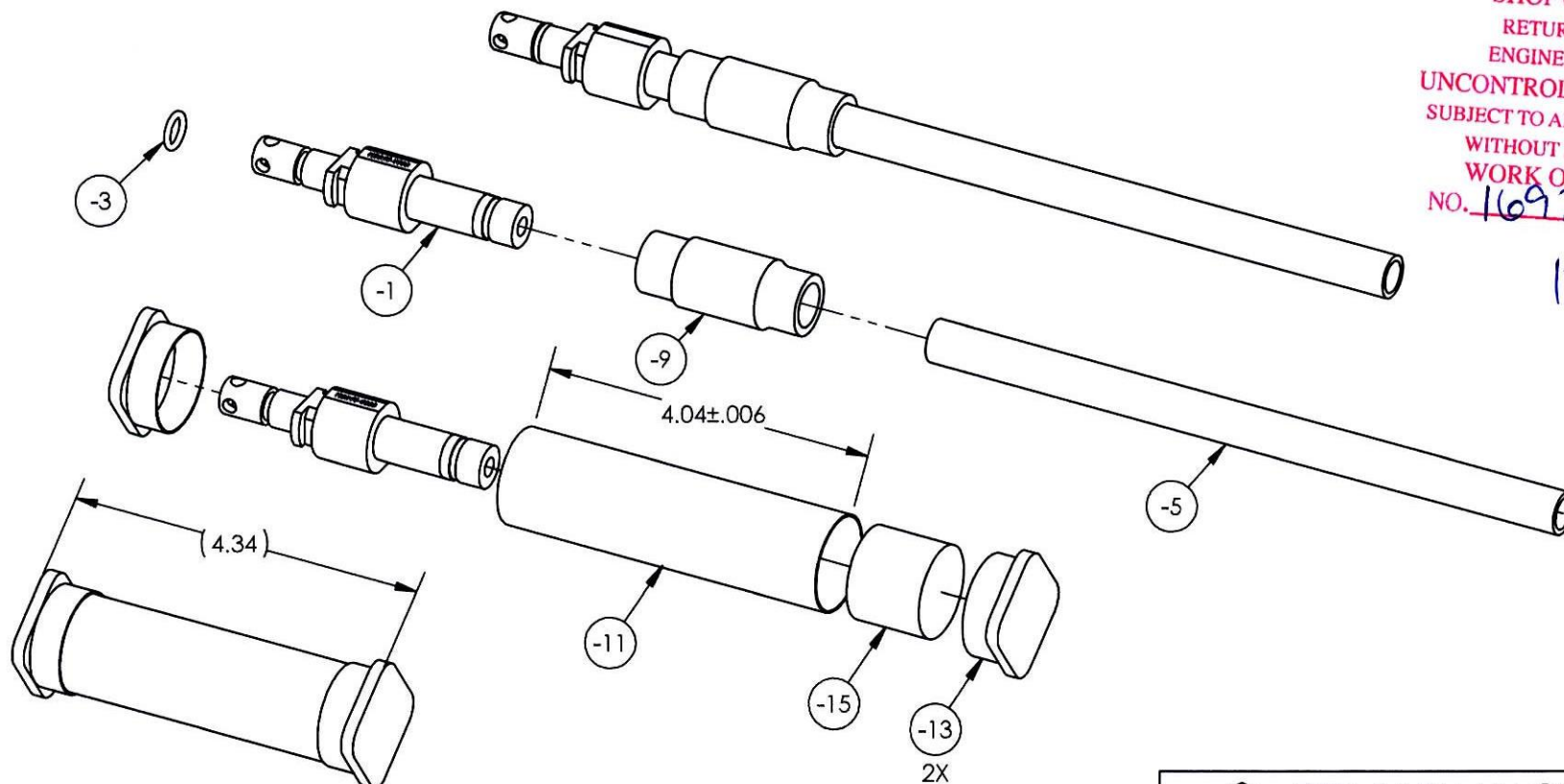
Work Order: _____ Part No. _____ NCR No. _____ Date : _____ Descript _____	DISPOSITION Rework ☐ Scrap ☐ Use as is ☐	AGAINST DEPARTMENT/PROCESS Skid-tube Machining ☐ Cross tube Small End ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Store/Packaging Supplier ☐ Engineering Quality ☐ Other ☐	 S033466 Tail Rotor Gearbox Drain Hose (Bell 430) PART NO: RB910-0003 Original Serial #: S033466 Revision: Operation: Start up Operation 01/18/18 Change No: Job No: 169222																																																																																								
Root Cause <table border="0" style="width:100%;"> <tr><td>Environment</td><td>☐</td><td>No Re-verify</td><td>☐</td></tr> <tr><td>Design</td><td>☐</td><td>Operator</td><td>☐</td></tr> <tr><td>Doc/Data</td><td>☐</td><td>Offset/Setup</td><td>☐</td></tr> <tr><td>Equip/Tooling</td><td>☐</td><td>Supplier</td><td>☐</td></tr> <tr><td>Handling/Pre</td><td>☐</td><td>Training</td><td>☐</td></tr> <tr><td>Material</td><td>☐</td><td>Use for Testing</td><td>☐</td></tr> <tr><td>Internal Transport</td><td>☐</td><td>Poor Information</td><td>☐</td></tr> <tr><td>Tribal Knowledge</td><td>☐</td><td>Rushing</td><td>☐</td></tr> <tr><td>LOA</td><td>☐</td><td>Product Improvement</td><td>☐</td></tr> <tr><td>Substation</td><td>☐</td><td>Process Improvement</td><td>☐</td></tr> <tr><td>Past Expiry Date</td><td>☐</td><td>Manufacturing Process</td><td>☐</td></tr> <tr><td>Misidentified</td><td>☐</td><td>Past Due</td><td>☐</td></tr> </table> <table border="0" style="width:100%;"> <tr><td>☐ Center not Concentric</td><td>☐ BOM/Route</td><td>☐ Surge</td><td>☐ Positioned Wrong</td></tr> <tr><td>☐ Cracks</td><td>☐ Broken/Damage/Defect</td><td>☐ Grain</td><td>☐ Outside Dimensions</td></tr> <tr><td>☐ Crimp/Kink/Ripple/Wave</td><td>☐ Inspection Incomplete/Unqualified</td><td>☐ Weld</td><td>☐ Over/Under tolerance</td></tr> <tr><td>☐ Cuffs</td><td>☐ Contamination</td><td>☐ Wrong Stock Pulled</td><td>☐ Part Incorrect</td></tr> <tr><td>☐ Crushing</td><td>☐ Countersink</td><td>☐ Out of Sequence</td><td>☐ Part Lost/Missing</td></tr> <tr><td>☐ Heat Treat</td><td>☐ Cut Too Short</td><td>☐ Off-set</td><td>☐ Part Moved</td></tr> <tr><td>☐ Wave/Twist in Tube</td><td>☐ Instructions Incomplete/Unclear</td><td>☐ Mislabeled</td><td>☐ Drawing</td></tr> <tr><td>☐ Marks/Chatter</td><td>☐ Drill Holes</td><td>☐ Fit/Function</td><td>☐ Finish</td></tr> <tr><td></td><td></td><td>☐ Misaligned/off center</td><td>☐ Misread</td></tr> <tr><td></td><td></td><td></td><td>☐ Turning Sequence</td></tr> </table>				Environment	☐	No Re-verify	☐	Design	☐	Operator	☐	Doc/Data	☐	Offset/Setup	☐	Equip/Tooling	☐	Supplier	☐	Handling/Pre	☐	Training	☐	Material	☐	Use for Testing	☐	Internal Transport	☐	Poor Information	☐	Tribal Knowledge	☐	Rushing	☐	LOA	☐	Product Improvement	☐	Substation	☐	Process Improvement	☐	Past Expiry Date	☐	Manufacturing Process	☐	Misidentified	☐	Past Due	☐	☐ Center not Concentric	☐ BOM/Route	☐ Surge	☐ Positioned Wrong	☐ Cracks	☐ Broken/Damage/Defect	☐ Grain	☐ Outside Dimensions	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Weld	☐ Over/Under tolerance	☐ Cuffs	☐ Contamination	☐ Wrong Stock Pulled	☐ Part Incorrect	☐ Crushing	☐ Countersink	☐ Out of Sequence	☐ Part Lost/Missing	☐ Heat Treat	☐ Cut Too Short	☐ Off-set	☐ Part Moved	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Mislabeled	☐ Drawing	☐ Marks/Chatter	☐ Drill Holes	☐ Fit/Function	☐ Finish			☐ Misaligned/off center	☐ Misread				☐ Turning Sequence
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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	SHORTENED LATCH FROM .125 TO .100	9/12/06	WP	
2	CHANGED P/N FROM HF090806, & ADDED FLAT FOR P/N	9/21/06	WP	
3	IMPLEMENTED NEW DWG. FORMAT, CONDENSED DIMS., AND ADDED ASSEMBLY VIEW. ALSO REDUCED -1 FROM THREE HOSE RIBS TO ONE.	5/20/08	WP	
4	CH'D -1 CALL OUT FROM MILL A .188 FLAT FOR P/N .081 TEXT PER G.E.	7/27/11	RJC	
5	-1 MODIFIED TO USE -9 COUPLING, ADDED -9, -11, -13, -15 TO BOM. CH'D DIM ON FLATS WAS .188 IS (2X .20 MIN). CH'D HOLE WAS $\varnothing .25 \pm .198$ IS $\varnothing .22$ THRU. ADDED (1.285) DIM. CH'D LATCH WIDTH WAS .432 IS .436. CH'D DIMS ON A-A WAS .100 X 45° IS 2X 45° DELETED .617. -7 DELETED.	1/24/2014	DPD	GE

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 169222 HJS

17-12-05



ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	QUILL	6061	$\varnothing 1 \times 3-1/2$	2
		B/O	-3	1	O-RING	VITON	2-011N70 OR MCMASTER-CARR #9263K642	1
		B/O	-5	1	HOSE	VINYL	$\varnothing 1/2$ O.D. x $\varnothing 3/8$ I.D. x 6ft KURI-TECH #K010-0608	1
		B/O	-9	1	COUPLING	NICKEL-PLATED BRASS	$\varnothing 1/2$ MCMASTER-CARR #51495K116	1
		B/O	-11	1	TUBE	POLYETHYLENE	$\varnothing 1.09$ MCMASTER-CARR #2044T47	1
		B/O	-13	2	CAP	VINYL	$\varnothing 1.09$ MCMASTER-CARR #2044T67	1
		B/O	-15	1	FOAM	POLYESTER/POLYURETHANE	$\varnothing 1 \times 1$ NEW PIG CORP. #PAD210	1

RED BARN MACHINE	
TITLE T/R GEARBOX DRAIN TOOL	
DWG NO. RB910-0003	REV 5
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .006 FRACTIONS ± 1/32 .XX ± .01 ANGLES ± .5° .X ± .1	
1. BREAK ALL SHARP EDGES .015 x 45° OR .016R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 9/7/2006
DRAWN BY: PERRITT APPROVED: <i>D Weil</i> USED ON MODEL BELL 430 SHEET 1 OF 2	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
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